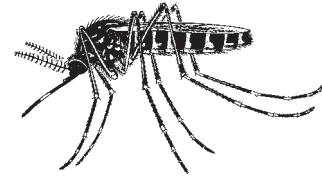

WEST NILE VIRUS

Culex tarsalis
Western encephalitis mosquito



WHAT IS WEST NILE VIRUS (WNV)?

West Nile Virus (WNV) is a mosquito-borne virus transmitted by a mosquito bite that produces either encephalitis or fever disease in susceptible people. The virus occurs in a natural cycle between mosquitoes (vectors) and vertebrates (reservoirs) with humans becoming involved by accident during WNV outbreaks. The virus also affects wildlife with some species (crows and horses) being extremely vulnerable to infection. The encephalitis and fever caused by the virus is not usually transmitted person-to-person, but largely by the bite of a competent mosquito vector.

Not all mosquitoes are capable of transmitting the WNV by bite. In fact, less than one in four mosquitoes that become infected is actually capable of transmitting the virus. In Orange County, several common mosquitoes are capable of serving as competent WNV vectors.

1. *Culex tarsalis* - Western encephalitis mosquito
2. *Culex quinquefasciatus* - Southern house mosquito
3. *Culex erythrothorax* - Tule mosquito
4. *Culex stigmatosoma* - Foul water mosquito

WHERE DO THESE MOSQUITOES BREED?

1. Wetlands supporting cattails and other associated vegetation that provide harborage for wildlife, including known reservoirs of WNV.
2. Residential backyards with containers that fill with rain and sprinkler water. Significant mosquito production sites also include fouled ornamental ponds and out-of-service swimming pools.
3. Blocked storm drains and catch basins that retain runoff water after winter and spring rains and from faulty sprinklers and poor water management.

There are three major bird species (house sparrows, house finches, doves) locally that traditionally have been

reservoirs (carriers) of native encephalitis viruses, that may be important in the related WNV cycle.

SYMPTOMS OF THE WNV INCLUDE

1. Flu-like symptoms associated with fever, nausea, headache, muscle aches, and occasional skin rash.
2. Severe cases sometimes exhibit loss of coordination, delirium, coma, and death. Only one in 20 (5%) severe cases results in fatality.
3. Currently, there are no known cures for WNV other than the natural immunity of the infected individual. There is an ongoing effort to produce a human vaccine. A vaccine already exists for horses.

MOSQUITO BITE PREVENTION

1. When outdoors during the evening and nighttime hours, wear a long-sleeved shirt and long pants in combination with an effective mosquito repellent. Repellents should be reapplied according to the product instructions.
2. Replace all torn or loose door and window screens. All screening should fit snugly around the edges to prevent mosquitoes from entering through the cracks. Do not leave doors and windows open or unprotected without screens!

SOURCE REDUCTION

The best mosquito and bite protection is through preventing mosquitoes from breeding on your property. During the winter and spring rains and summer irrigation, check your yard for any standing water that may be present in flowerpots, buckets, trash cans, old tires, uncovered boats, ornamental ponds, and "green" swimming pools.

For more information about the West Nile Virus or mosquitoes, please visit our web site at <http://www.ocvcd.org> or call the Orange County Vector Control District at 714-971-2421.



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Please Visit Our Web Site www.ocvcd.org

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